

California's stem cell bank is open for business

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San Francisco, CA – The largest publicly available stem cell bank in the world is now open for business. In September the bank is offering the first 300 different stem cell lines for researchers interested in gaining a deeper understanding of, and developing treatments for 11 common diseases and disorders.

The Bank, which is funded by CIRM, California's stem cell agency, is collecting tissue samples from up to 3,000 volunteer donors. Those samples will then be turned into high quality stem cell lines – known as induced pluripotent stem cells or iPSCs – which are available to researchers throughout California and the rest of the world.

"We believe the Bank will be an extraordinarily important resource in helping advance the use of stem cell tools for the study of diseases and finding new ways to treat them," says Jonathan Thomas, Ph.D., J.D., Chair of the agency's governing Board, which approved more than \$32 million to fund the Bank. "While many stem cell efforts in the past have provided badly needed new tools for studying rare genetic diseases, this Bank represents both rare and common diseases that afflict many Californians. Stem cell technology offers a critical new approach toward developing new treatments and cures for those diseases as well."

Some of the tissue collected will be from people with a particular condition, others will be from healthy individuals and will act as a control, allowing us to compare how healthy cells are different from disease-affected cells.

The conditions that are the focus of the iPSC Bank are:

- · Heart disease
- Lung disease
- Liver disease
- Blinding eye diseases
- · Childhood neurological disorders such as epilepsy, autism and cerebral palsy
- · Alzheimer's Disease

The creation of the Bank is very much a team operation. Tissue samples are being collected by researchers at the University of California San Francisco, U.C. San Diego, U.C. Los Angeles and Stanford University. All donors undergo a rigorous consent and approval process before any tissue is collected. Once collected those samples are then turned into different cell lines by Cellular Dynamics International (CDI) and then stored and distributed by Coriell Institute for Medical Research from a facility at the Buck Institute in Novato. California.

"Coriell Institute is a leader in managing large and complex biospecimen collections and distributing samples and data worldwide to promote research," says Michael Christman, Ph.D., president and CEO of Coriell. "We are very pleased to be part of this CIRM initiative and advance stem cell research for several devastating yet common diseases."

"iPSC lines are useful for researchers in a number of different ways. The cells are pluripotent, meaning they can be turned into any type of cell in the body. Because the cells are genetically identical to the people who donated the samples scientists can use the cells to determine how, for example, a brain cell from someone with autism differs from a normal brain cell. That can enable them to study how diseases develop and progress, and also to test new drugs or treatments against defects observed in those cells to see which, if any,

might offer some benefits.

"iPSCs are proving to be powerful tools for disease modeling, drug discovery and the development of cell therapies, capturing human disease and individual genetic variability in ways that are not possible with other cellular models," says Kaz Hirao, CDI Chairman and CEO. "The lines available from the CIRM stem cell bank directly complement CDI's ability to provide differentiated cells corresponding to each of these iPSC lines, which will allow researchers to model the diseases represented, better understand disease progression, perform more targeted drug discovery, and ultimately lead to better treatments."

The number of available cell lines is expected to increase to 750 by February 2016.

For more information on how to buy a cell line go to http://catalog.coriell.org/CIRM or email CIRM@Coriell.org

About CIRM

At CIRM, we never forget that we were created by the people of California to accelerate stem cell treatments to patients with unmet medical needs, and to act with a sense of urgency commensurate with that mission.

To meet this challenge, our team of highly trained and experienced professionals actively partners with both academia and industry in a hands-on, entrepreneurial environment to fast track the development of today's most promising stem cell technologies.

With \$3 billion in funding and over 280 active stem cell programs in our portfolio, CIRM is the world's largest institution dedicated to helping people by bringing the future of medicine closer to reality.

For more information go to www.cirm.ca.gov

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